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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,206	09/29/2005	Jingyue Ju	0575/66833APCT-US/JPW/MJW	5439

23432 7590 10/01/2007  
COOPER & DUNHAM, LLP  
1185 AVENUE OF THE AMERICAS  
NEW YORK, NY 10036

EXAMINER
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PANDE, SUCHIRA

ART UNIT	PAPER NUMBER
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1637

MAIL DATE	DELIVERY MODE
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10/01/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/521,206

**Applicant(s)**

JU, JINGYUE

**Examiner**

Suchira Pande

**Art Unit**

1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-25 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

- a. Species of interactions comprise (claim 3 is generic)
  - i. a biotin-streptavidin interaction (claim 6 in part, claims 16-21)
  - ii. a phenylboronic acid-salicylhydroxamic acid interaction (claim 6 in part)
  - iii. an antigen-antibody interaction (claim 6 in part).
- b. Species of step of releasing comprises (claim 3 is generic)
  - iv. Disrupting the interaction (claims 7-8)
  - v. Cleaving the linker (claims 10-12)
- c. Species of position where the linker is attached (claim 2 is generic)
  - vi. 5-position of cytosine or thymine (claim 9 in part)
  - vii. 7-position of adenine or guanine (claim 9 in part)
- d. Species of wherein the linker comprises (claim 2 is generic)
  - viii. a derivative of 4-aminomethyl benzoic acid (claim 13 in part)
  - ix. a 2-nitrobenzyl group (claim 13 in part)
  - x. a derivative of a 2-nitrobenzyl group (claim 13 in part)
- e. Species of linker containing Fluorine atoms (claim 14 is generic)

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- xi. Pick one structure for examination from the three depicted (claim 15 in part)
- f. Species of biotinylated ddNTP (claim 16 is generic)
  - xii. ddATP-II-biotin (claim 17 in part),
  - xiii. ddCTP-II-biotin, (claim 17 in part),
  - xiv. ddGTP-II-biotin, (claim 17 in part),
  - xv. ddTTP-16-biotin (claim 17 in part),
  - xvi. 4 different structures depicted, pick one for examination (claim 18 in part)
  - xvii. 4 different structures depicted, pick one for examination (claim 19 in part)
  - xviii. 4 different structures depicted, pick one for examination (claim 20 in part)
  - xix. 4 different structures depicted, pick one for examination (claim 21 in part)

Applicant is required, in reply to this action, to elect a **single** species from categories **a) through f)** to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

2. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Upadhva et al. (US RE 39,663 E reissued on May 29, 2007. Original Pat 6,221,604 issued on April 24, 2001) teach the method of claim 1. See whole patent. Therefore prior art taught the method of claim 1 to one of ordinary skill in the art at the time of the invention. Therefore unity of invention is lacking. Hence the species lack the same or corresponding special technical features.

Claims 1-3 are generic to the above disclosed patentably distinct species: the compounds disclosed and identified above by name or structural formula in the claims are different chemicals. The species are independent or distinct because they are drawn to different variables, which will yield different chemical structures. The search for the above species is not co-extensive particularly with regard to the non-patent literature search. Thus, it would be an undue burden to examine all the species in one application.

3. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the

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requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suchira Pande whose telephone number is 571-272-9052. The examiner can normally be reached on 8:30 am -5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 571-272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Suchira Pande  
Examiner  
Art Unit 1637

/Teresa Strzelecka/

Teresa Strzelecka  
Primary Examiner, Art Unit 1637

September 27, 2007